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IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA

9 LILITH GAMES (SHANGHAI) CO. ) Case No. 15-CV-01267-SC  
10 LTD., )  
11 Plaintiff, ) ORDER DENYING PLAINTIFF'S  
12 v. ) MOTION FOR PRELIMINARY  
13 UCOOL, INC. AND UCOOL LTD., ) INJUNCTION  
14 Defendants. )  
15 \_\_\_\_\_ )  
16  
17

18 **I. INTRODUCTION**

19 Now before the Court is Plaintiff Lilith Games Co.'s  
20 ("Lilith") motion for preliminary injunction. ECF No. 30 ("Mot.").  
21 Lilith brings this motion to enjoin Defendants uCool, Inc. and  
22 uCool LTD ("uCool") from "any further misappropriation of Lilith's  
23 trade secret" and from "reproducing, copying, preparing any  
24 derivative works, and/or distributing any of Lilith's registered  
25 copyrights . . . which necessarily includes Lilith's code that is  
26 now unlawfully contained in uCool's game Heroes Charge . . . ".  
27 Mot at 24.  
28 ///

1 The motion is fully briefed,<sup>1</sup> and oral argument was held on  
2 September 11, 2015. Having considered the parties' submissions,  
3 argument, and the relevant law, and for the reasons discussed  
4 herein, Lilith's motion to preliminarily enjoin uCool is DENIED,  
5 and uCool's evidentiary objections are OVERRULED.

6

7 **II. BACKGROUND**

8 Plaintiff Lilith is a video game developer that released the  
9 game Dao Ta Chuan Qi (translated as "Sword and Tower")<sup>2</sup> in China in  
10 February 2014. Lilith holds Chinese copyright registrations in  
11 Sword and Tower's Lua<sup>3</sup> source code and alleges that it owns the  
12 copyrights to that code pursuant to Chinese copyright law. Sword  
13 and Tower has enjoyed great commercial success, and as of August  
14 2014, was the leading game in Asia. Mot. at 5.

15 Defendant uCool is a video game marketer who allegedly  
16 obtained access to Lilith's copyrighted software code for Sword and  
17 Tower and used it to create its own game, Heroes Charge, which it  
18 published in the United States in August 2014. [REDACTED]

19 [REDACTED]  
20 [REDACTED] [REDACTED]  
21 [REDACTED]  
22 [REDACTED]  
23 [REDACTED]

24  
25 <sup>1</sup> ECF Nos. 69 ("Opp'n"), 77 ("Reply"), 87-1 ("Surreply").

26 <sup>2</sup> The game has also been referred to as "Dota Legends". See, e.g.,  
ECF No. 43-01 ¶ 2.

27 <sup>3</sup> Lua is a programming language commonly used to develop video  
games.

28

1 [REDACTED] [REDACTED]  
2 [REDACTED] [REDACTED]  
3 [REDACTED]  
4 [REDACTED]  
5 [REDACTED] [REDACTED]  
6 Lilith first learned of uCool's allegedly unlawful copying in  
7 August 2014, at which point it attempted to resolve the dispute by  
8 issuing a take-down notice to Apple.<sup>4</sup> The parties then exchanged  
9 correspondence through the end of November 2014, when those talks  
10 stalled without any action from Apple regarding the takedown  
11 request.

12 In March 2015, Lilith decided to release Sword and Tower in  
13 countries outside of China including the United States, Japan, and  
14 certain European countries. Because of the similarities between  
15 the games and because Heroes Charge was already active in many of  
16 these countries, many users believed that Sword and Tower had been  
17 copied from Heroes Charge and posted comments to that effect on the  
18 internet. See Mot. at 12-13. Lilith cites these comments as  
19 evidence that uCool's alleged copying has created ongoing damage to  
20 Lilith's reputation and confusion in the marketplace. Id. Lilith  
21 also claims that it has been unable to enter into an exclusive  
22 distribution agreement in the United States as a result of the  
23 presence of Heroes Charge in the US market. Id.

24 Shortly thereafter on March 18, 2015, Lilith filed this action  
25 -- four months after talks with uCool had broken down. Lilith

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26<sup>4</sup> See [https://www.youtube.com/watch?v=GdGKx\\_IhVbg](https://www.youtube.com/watch?v=GdGKx_IhVbg)

27<sup>5</sup> Heroes Charge is sold through the Apple and Android (Google Play)  
28 app stores.

1 argues that the four month delay was justified because Lilith is a  
2 small start-up<sup>6</sup> and was reluctant to become involved in costly  
3 litigation until it was necessary. Filing suit was not necessary  
4 until March 2015, according to Lilith, because the harm to Lilith  
5 in the form of damage to its reputation and its inability to secure  
6 exclusive distribution agreements did not become apparent until  
7 March 2015 when Lilith attempted to enter markets where Heroes  
8 Charge had already been released.

9 In its first claim for relief for copyright infringement,  
10 Lilith alleges that uCool copied Lilith's copyrighted source code  
11 embodied in Sword and Tower and used it to create the source code  
12 for Heroes Charge. Because Sword and Tower is not a United States  
13 work as defined in 17 U.S.C. Section 101, Lilith brings its  
14 copyright infringement claim under the Berne Convention, an  
15 international agreement governing copyright.

16 In its second claim for relief, Lilith alleges that 240,000  
17 lines of Lua code embodied in Sword and Tower is a trade secret and  
18 that uCool knowingly misappropriated that trade secret in violation  
19 of California's Uniform Trade Secrets Act (Cal. Civ. Code § 3426,  
20 et seq.) when it allegedly used Lilith's code to create Heroes  
21 Charge. In support of its trade secret claim, Lilith has presented  
22 evidence of efforts made to maintain the confidentiality of its  
23 source code. For example, Lilith stores the source code on a  
24 secure server and limits access only to those employees who need it  
25 to perform their duties. Lilith also encrypts the Sword and Tower

26  
27 <sup>6</sup> It is unclear what Lilith means by "small start-up," particularly  
28 given that Lilith owns the most popular game in Asia.

1 source code so that it cannot be easily deciphered. Of the twenty-  
2 one employees who have had access to the source code, however, only  
3 five signed confidentiality agreements prior to this litigation.

4 Two weeks after filing its complaint, Lilith filed a motion  
5 for preliminary injunction. ECF No. 17. On April 22, 2015, Lilith  
6 withdrew its motion as a result of a dispute with uCool relating to  
7 a mutual exchange of source code for analysis but re-filed the  
8 motion on May 5, 2015. On June 4, 2015, the Court granted uCool's  
9 motion for an extension of time so that both sides could perform  
10 limited discovery prior to the close of briefing on this motion,  
11 including a mutual exchange of source code. ECF No. 48. In  
12 response to Lilith's discovery requests, uCool produced a new  
13 version of the Heroes Charge source code that had yet to be  
14 released. This new version was written in a different programming  
15 language called C#. Subsequently, uCool also produced portions of  
16 the Lua version of the Heroes Charge source code. Both parties  
17 analyzed the code that was produced and submitted expert  
18 declarations as part of their briefing on this motion. See ECF  
19 Nos. 69-17 ("Kitchen Decl."), 74-4 ("Roman Decl."), 109 ("Suppl.  
20 Roman Decl."). In addition to the briefs and supporting papers,  
21 the Court heard oral argument on September 11, 2015, at which the  
22 parties agreed they could be ready for trial in approximately nine  
23 months.

24

25 **III. LEGAL STANDARD**

26 Before a court can grant preliminary injunctive relief, a  
27 plaintiff must first "establish that he is likely to succeed on the  
28 merits, that he is likely to suffer irreparable harm in the absence

1 of preliminary relief, that the balance of equities tips in his  
2 favor, and that an injunction is in the public interest." Marlyn  
3 Nutraceuticals, Inc. v. Mucos Pharma GmbH & Co., 571 F.3d 873, 877  
4 (9th Cir. 2009) (citations omitted). This is commonly referred to  
5 as the "four-factor test." See, e.g., Sierra Forest Legacy v. Rey,  
6 577 F.3d 1015, 1021 (9th Cir. 2009).

7 Although it was once Ninth Circuit law that a plaintiff in  
8 copyright cases was entitled to a presumption of irreparable harm  
9 on a showing of likelihood of success on the merits, the Supreme  
10 Court ended that practice in eBay Inc. v. MercExchange, L.L.C..  
11 See 547 U.S. 388, 393-94 (2006) ("[T]his Court has consistently  
12 rejected invitations to replace traditional equitable  
13 considerations with a rule that an injunction automatically follows  
14 a determination that a copyright has been infringed."). Two years  
15 later in Winter v. Natural Res. Def. Council, Inc., the Court  
16 further held that the Ninth Circuit's rule allowing for a mere  
17 "possibility" of irreparable harm was insufficient. See 555 U.S.  
18 7, 20 (2008). Thus, as the Ninth Circuit has since clarified,  
19 "even in a copyright infringement case, the plaintiff must  
20 demonstrate a likelihood of irreparable harm as a prerequisite for  
21 injunctive relief." Flexible Lifeline Sys. v. Precision Lift,  
22 Inc., 654 F.3d 989, 998 (9th Cir. 2011) (emphasis added).  
23 Moreover, because a preliminary injunction "is an extraordinary  
24 remedy never awarded as of right," a district court may decide to  
25 deny a preliminary injunction pursuant to its equitable discretion  
26 even where success on the merits is likely. Winter, 555 U.S. at  
27 24; see 17 U.S.C. § 502(a) (providing that a court "may . . . grant  
28 temporary and final injunctions on such terms as it may deem

1 reasonable to prevent or restrain infringement of a copyright")  
2 (emphasis added); eBay Inc., 547 U.S. at 391 (2006); Perfect 10,  
3 Inc. v. Google, Inc., 653 F.3d 976, 980 (9th Cir. 2011).

4 Although eBay and Winters require district courts to consider  
5 each of the factors of the four-factor test before granting a  
6 preliminary injunction, the Ninth Circuit has held that the factors  
7 may be balanced such that "a stronger showing of one element may  
8 offset a weaker showing of another." Alliance for the Wild Rockies  
9 v. Cottrell, 632 F.3d 1127, 1131 (9th Cir. 2011).

10 In denying a preliminary injunction, however, a court need not  
11 make findings on all four factors if fewer factors are dispositive  
12 of the issue. See Winter, 555 U.S. at 23-24 ("A proper  
13 consideration of [the balance of hardships and the effect of the  
14 preliminary injunction on the public interest] alone requires  
15 denial of the requested injunctive relief. For the same reason, we  
16 do not address the lower courts' holding that plaintiffs have also  
17 established a likelihood of success on the merits."); Global  
18 Horizons, Inc. v. United States Dep't of Labor, 510 F.3d 1054, 1058  
19 (9th Cir. 2007) ("Once a court determines a complete lack of  
20 probability of success or serious questions going to the merits,  
21 its analysis may end, and no further findings [on irreparable harm,  
22 balance of hardships, or public interest] are necessary.").

23

24 **IV. DISCUSSION**

25 **A. Mootness**

26 In its opposition, uCool argues that Lilith's motion is moot  
27 because uCool recently completed a rewrite of the Heroes Charge  
28 source code using a different programming language. This new

1 version of Heroes Charge uses the programming language C# instead  
2 of Lua, the language used by Lilith to write the source code for  
3 Sword and Tower. Lilith's expert, however, presented evidence in  
4 his declaration showing that the source code is still substantially  
5 similar notwithstanding the rewrite, including significant portions  
6 that were "literally copied and are identical" or "copied and then  
7 translated, modified, reordered, or otherwise obscured in such a  
8 way that common code comparison programs would not be able to  
9 detect the similarities." Roman Decl. ¶ 43. uCool counters that  
10 (1) Lilith's analysis only specifically pointed to 19 lines of  
11 code, (2) C# is so different from Lua "that the new code cannot  
12 have been copied from Lilith's code but must have been built from  
13 scratch", and (3) Lilith's analysis focused on external files and  
14 abstract elements that are not related to the code at issue.  
15 Surreply at 4.

16 The C# version of Heroes Charge was being used by less than 1%  
17 of users as of the date of the hearing on this motion. Over 99% of  
18 users continue to use a Lua version of the game, which the parties  
19 agree contains "significant similarities" to the Lua code embodied  
20 in Sword and Tower. Kitchen Decl. ¶ 135. The parties' dispute  
21 over whether the C# version of Heroes Charge is substantially  
22 similar to the Lua version of Sword and Tower, therefore, is  
23 largely academic. Furthermore, as explained in subsequent  
24 sections, insofar as the C# version of Heroes Charge merely  
25 translated Lilith's code from Lua to C#, it would still infringe on  
26 Lilith's copyright in the same way that a French translation of an  
27 English novel would infringe on the latter's copyright.

28 Accordingly, the Court finds that Lilith's motion is not moot.

1                   **B. Likelihood of Success on the Merits**

2                   Lilith pleads two claims in its Second Amended Complaint:  
3                   copyright infringement and trade secret misappropriation. See ECF  
4                   No. 83 ("SAC"). While Lilith must set forth evidence to support a  
5                   likelihood of success on at least one of its claims, it need not  
6                   demonstrate an absolute certainty of success. See Abdul Wali v.  
7                   Coughlin, 754 F.2d 1015, 1024-1025 (2d Cir. 1985); Netlist Inc. v.  
8                   Diablo Techs., Inc., No. 13-cv-05962, 2015 U.S. Dist. LEXIS 3285,  
9                   at \*19-20 (N.D. Cal. Jan. 12, 2015).

10                  **1. Copyright Infringement**

11                  In order to demonstrate a likelihood of success on its  
12                  copyright claim, Lilith must show (1) ownership of a valid  
13                  copyright and (2) copying of the original elements of the protected  
14                  work. Feist Publications v. Rural Tel. Serv. Co., 499 U.S. 340,  
15                  361 (1991).

16                  **a. Ownership**

17                  Because Lilith claims it owns a Chinese copyright to the  
18                  source code in Sword and Tower, ownership is a question of Chinese  
19                  law. See Lahiri v. Universal Music & Video Distribution, Inc., 513  
20                  F. Supp. 2d 1172, 1174 n.4 (C.D. Cal. 2007).

21                  Article 59 from the People's Republic of China Copyright Law  
22                  ("PRCCL") provides that the State Council is responsible for  
23                  setting measures for the protection of computer software. ECF No.  
24                  69-2 ("PRCCL Amendments") at 25-26 ("Article 59: Measures for the  
25                  protection of computer software and of the right of communication  
26                  through information network shall be formulated separately by the  
27                  State Council.") (emphasis added). Pursuant to that mandate, the  
28                  ///

1 State Council has issued Regulations on Computer Software  
2 ("Software Regulations"). ECF No. 77-9 ("Chu Decl.") ¶ 9.

3 Article 7 of the Software Regulations states that registration  
4 of a copyright is prima facie evidence of copyright ownership. Id.  
5 ¶¶ 10-12. The Software Regulations also state that the "copyright  
6 in a piece of software belongs to its developer." Id. ¶ 10. If an  
7 organization's "name is mentioned in connection with a piece of  
8 software," the organization, "shall, in the absence of proof to the  
9 contrary, be its developer." Id. In addition, Article 13 provides  
10 that, if an employee develops a piece of software in the course of  
11 his or her employment, the employer is the owner if just one of the  
12 following conditions are met:

13 (1) the software is developed based on the development  
14 objective explicitly designated in the line of his  
service duty;

15 (2) the software is a foreseeable or natural result of  
16 his work activities in the line of his service duty; or

17 (3) the software is developed mainly with the material  
18 and technical resources of the legal entity or other  
organization, such as funds, special equipment or  
unpublished special information, and the legal entity or  
other organization assumes the responsibility thereof.

19  
20 Id. ¶ 13.

21 Here, Lilith owns valid Chinese copyright registrations and  
22 therefore has provided prima facie evidence of copyright ownership  
23 under Chinese law. ECF Nos. 17-1 ¶ 4, 17-2. In addition, it is  
24 undisputed that Lilith is the entity that filed for and obtained  
25 the copyright registrations and that these registrations expressly  
26 list Lilith as the copyright owner. Thus, Lilith is the developer  
27 of the Sword and Tower source code and the copyright for Sword and  
28 Tower consequently belongs to Lilith. Finally, even though the

1 source code for Sword and Tower was developed by Lilith's  
2 employees, Lilith retains ownership of the copyright even if it did  
3 not secure assignments from those employees because it meets all of  
4 the conditions set out in Article 13 of the Software Regulations.

5 For these reasons, the Court finds that Lilith is likely to  
6 prove copyright ownership at trial.

7 **b. Copying**

8 Copying can be established by either presenting direct  
9 evidence of copying, or absent that, circumstantial evidence that  
10 the infringer (1) had access to the copyrighted work, and (2) that  
11 the parties' works are substantially similar. L.A. Printex Indus.  
12 Inc. v. Aeropostale, Inc., 676 F.3d 841, 846 (9th Cir. 2012).

13 **i. Access**

14 "Circumstantial evidence of reasonable access is proven in one  
15 of two ways: (1) a particular chain of events is established  
16 between the plaintiff's work and the defendants access to that work  
17 . . . , or (2) the plaintiff's work has been widely disseminated."  
18 Three Boys Music Corp. v. Bolton, 212 F.3d 477, 482 (9th Cir.  
19 2000).

20 uCool's access is demonstrated by the fact that Lilith's  
21 copyright declaration can be found in at least one version of  
22 Heroes Charge. See ECF No. 19 ("Ray Decl.") (providing a video  
23 recording of the copyright declaration appearing in Heroes Charge).  
24 Lilith also argues that uCool had access because Sword and Tower  
25 has been widely disseminated since its release in February 2014.  
26 It is unclear, however, how this latter argument is relevant unless  
27 the source code is included anytime a user downloads the game from  
28 the app store. It is the Court's understanding that the source

1 code is not disseminated with the game itself, and therefore the  
2 fact that Sword and Tower has been "downloaded over 29 million  
3 times through one distribution channel alone" does not help to  
4 establish access. Mot. at 16. Regardless, based on the presence  
5 of Lilith's copyright declaration alone, the Court concludes that  
6 Lilith is likely to satisfy the element of access at trial.

## ii. Substantial Similarity

Computer programs, including video games, are protected under copyright law as literary works containing both literal and non-literal elements.<sup>7</sup> See Miller v. Facebook, Inc., No. C 10-00264 WHA, 2010 WL 2198204, at \*4 (N.D. Cal. May 28, 2010). Just as the literal elements of a book are the words themselves, the literal elements of a computer program are the alphanumeric instructions written by a programmer -- i.e., the source code. See Johnson Controls, Inc. v. Phoenix Control Sys., Inc., 886 F.2d 1173, 1175 (9th Cir. 1989). This can be contrasted with the non-literal elements, expressive aspects of the source code steps removed from the alphanumeric instructions themselves. In the case of a book, non-literal elements include the characters, setting, and plot created by the words on the page. Similarly, the non-literal elements of a computer program include expressive elements created

23     <sup>7</sup> The distinction between literal and non-literal elements is  
24     separate from the distinction between literal and non-literal  
25     copying. See Altai, 982 F.2d at 701-02. "Literal" copying is  
26     verbatim copying of original expression. "Non-literal" copying is  
27     "paraphrased or loosely paraphrased rather than word for word." Lotus Dev. Corp. v. Borland Int'l, 49 F.3d 807, 814 (1st Cir.  
1995). Both types of copying are unlawful, and both are at issue  
in this case. The Court uses the word "literal" in this order,  
however, to distinguish the types of protectable elements, not as a  
synonym for verbatim copying.

1 by the source code: the code's order, sequence, and structure; the  
2 user interface (including artwork and other visual elements  
3 embodied in the code); and -- in the case of sophisticated video  
4 games -- the plot, characters, and setting of the game. See id. at  
5 1175. It is well established that copyright protection for a  
6 computer program extends to both literal and non-literal elements  
7 of a computer program. See id.; Computer Associates Int'l, Inc. v.  
8 Altai, Inc., 982 F.2d 693, 702 (2d Cir. 1992). Thus, the Court  
9 will examine each in turn.

## 1. Literal Elements

11 Substantial similarity in the literal elements of a computer  
12 program can be demonstrated either by showing verbatim (or near  
13 verbatim) copying of the source code or that the "fundamental  
14 essence" of the code was duplicated. See 4-13 Nimmer on Copyright  
15 § 13.03. Returning to the book analogy, the fundamental essence of  
16 a book passage is duplicated when an infringer paraphrases the  
17 passage or simply translates it into a different language.  
18 Similarly, copying will be found where source code is translated  
19 from one programming language to another or where insignificant  
20 changes are made, such as replacing certain terms, reordering lines  
21 of code, or adding or removing comments.<sup>8</sup> See also Roman Decl. ¶  
22 53 (listing common methods used to obfuscate copying).

23 If at least some amount of copying can be shown, whether the  
24 works are substantially similar turns on whether the copying is

<sup>8</sup> Similarly, such minor variations violate a copyright holder's exclusive right to create derivative works. See 1-3 Nimmer on Copyright § 3.01 ("a work will be considered a derivative work only if it would be considered an infringing work . . . .").

1 sufficiently extensive to constitute a substantial portion of the  
2 plaintiff's work. 4-13 Nimmer on Copyright § 13.03. "The  
3 quantitative relation of the similar material to the total material  
4 contained in plaintiff's work is certainly of importance. However,  
5 even if the similar material is quantitatively small, if it is  
6 qualitatively important, the trier of fact may properly find  
7 substantial similarity." Id.

8 Lilith embedded within the Sword and Tower source code a  
9 copyright declaration that, if triggered, results in a pop-up  
10 window that reads "LILITH GAMES ©." Lilith provided the Court with  
11 convincing evidence that at least one version of Heroes Charge  
12 contains the code that triggers this copyright declaration. See  
13 Ray Decl.. Although uCool claims it was unable to replicate the  
14 pop-up, it conspicuously fails to identify the version of Heroes  
15 Charge used in those attempts -- that is, whether it used the same  
16 version used by Lilith (Version 1.8.1) or whether it used later  
17 versions that uCool had changed subsequent to the start of this  
18 litigation to prevent the pop-up from appearing. uCool also  
19 refused to provide this information in discovery. ECF No. 77-1 ¶¶  
20 3, 9, 11.

21 The appearance of Lilith's copyright declaration in uCool's  
22 game is sufficient to establish more than a de minimis level of  
23 copying. See Brocade Commc'nns Sys v. A10 Networks, Inc., No. 10-  
24 3428 PSG, 2013 U.S. Dist. LEXIS 8113, at \*34-36 (N.D. Cal. Jan. 10,  
25 2013) (holding that the copying of 145 lines of copyrighted code  
26 provided substantial evidence that defendants' actions exceeded  
27 merely de minimis copying of code). If that were not enough,  
28 Lilith presented other evidence of widespread duplication. For

1 example, Lilith provided the Court with side-by-side comparisons of  
2 the source code in Sword and Tower as compared to the C# version of  
3 Heroes Charge. The comparisons show that much of the code in  
4 Heroes Charge is identical, merely translated into C#, or  
5 insignificantly modified. See, e.g., Roman Decl. ¶¶ 70, 71, 74,  
6 79, 87, 88, 97-99. Lilith also provided the Court with comparisons  
7 of the source code in Sword and Tower as compared to a Lua version  
8 of Heroes Charge. The comparison showed again that much of the  
9 code is identical. See, e.g., Suppl. Roman Decl. ¶¶ 16-20, 22.

10 Considering the literal elements of the source code alone, the  
11 Court finds that a finder of fact is likely to conclude that the  
12 source code for Heroes Charge is substantially similar to the  
13 source code for Sword and Tower. Nevertheless, the Court also  
14 examines the non-literal elements of the source code in the  
15 following section.

16 **2. Non-Literal Elements**

17 Whether the non-literal elements of a program "are protected  
18 depends on whether, on the particular facts of each case, the  
19 component in question qualifies as an expression of an idea, or an  
20 idea itself." Id. The Ninth Circuit has endorsed an "abstraction-  
21 filtration-comparison" test formulated by the Second Circuit and  
22 expressly adopted by several other circuits. Sega Enters. Ltd. v.  
23 Accolade, Inc., 977 F.2d 1510, 1525 (9th Cir. 1992) ("In our view,  
24 in light of the essentially utilitarian nature of computer  
25 programs, the Second Circuit's approach is an appropriate one.").  
26 As the Second Circuit explains, this test has three steps. In the  
27 abstraction step, the court identifies which aspects of the program  
28 constitute its expression and which are the ideas. In the

1 filtration step, the court "sift[s] out all non-protectable  
2 material," including ideas and "expression that is necessarily  
3 incidental to those ideas." Id. at 706. In the final step, the  
4 court compares the remaining creative expression with the allegedly  
5 infringing program.

6 In the expert declaration of Kendyl Roman, Lilith provided an  
7 analysis of the non-literal elements of the Lua source code from  
8 Sword and Tower and the C# source code from Heroes Charge. Mr.  
9 Roman states that he applied the abstraction-filtration-comparison  
10 test in his analysis. Mr. Roman, however, failed to document his  
11 application of each step, and it is not entirely clear as a result  
12 whether all of the similarities to which he points are protected by  
13 copyright. Nevertheless, it is clear that there are substantial  
14 similarities across a significant number of copyrighted elements.  
15 For example, at the component level of abstraction, similar groups  
16 of files are found in similar directories, such as the files for  
17 the user interface. Roman Decl. ¶ 67. In addition, at the flow  
18 chart level of abstraction, the sequences show that the same  
19 algorithm is being implemented. Id. ¶ 80. Further, at the  
20 parameter list level of abstraction, the function calls show  
21 identical and equivalent parameter lists. Id. ¶ 81. Finally, at  
22 the function level of abstraction, many of the functions are  
23 identical and show up in the same order inside the file. Id. ¶ 82.

24 Lilith also presents evidence of significant similarities  
25 between the Lua versions of both games. See generally Suppl. Roman  
26 Decl.. Although uCool attempts to dispute some aspects of Lilith's  
27 analysis, uCool's own expert admitted in his declaration that  
28 "there are significant similarities between the Lua source code for

1 Heroes Charge and the Lua source code for [Sword and Tower],  
2 including similarities in [non-literal elements such as] structure,  
3 function calls, and parameter values." Kitchen Decl. ¶ 135.

4 After considering expert reports from both sides, the Court  
5 finds that a finder of fact is likely to conclude that the non-  
6 literal elements of both the Lua and C# versions of Heroes Charge  
7 are substantially similar to the non-literal elements of Sword and  
8 Tower.

9 **3. User Interface**

10 The forgoing analysis is sufficient to establish that Lilith  
11 is likely to succeed in showing substantial similarity at trial.  
12 This includes evidence that uCool copied the source code itself  
13 (verbatim, with slight modifications, or by translating it from Lua  
14 to C#) as well as non-literal elements of the source code,  
15 including its structure, sequence, and organization. The question  
16 remains, however, whether the Court should also take into  
17 consideration the visual elements of the games as they appear on  
18 the computer screen as well as other aspects perceived by users  
19 (collectively "the user interface"<sup>9</sup>).

20 Both parties assert that Lilith's claims "present a relatively  
21 straightforward question of whether uCool copied Lilith's protected  
22 source code -- a question that will be largely resolved by  
23 comparing the alphanumeric instructions read by a computer . . . ."  
24 ECF No. 61 at 1-2, Opp'n at 1. Lilith also argues, however, that  
25

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26 <sup>9</sup> "The user interface, also called the 'look and feel' of the  
27 program, is generally the design of the video screen and the manner  
in which information is presented to the user. Johnson Controls,  
28 Inc., 886 F.2d at 1176 n.3.

1 the similarities in the games' user interfaces are relevant because  
2 they "constitute circumstantial evidence of uCool's unlawful  
3 copying [of the Sword and Tower source code]" (Reply at 8). In  
4 addition, Lilith points in its Second Amended Complaint ("SAC") to  
5 the user interface as one of the expressive elements of its source  
6 code protected by its copyright. See SAC ¶ 13 (providing various  
7 screenshots comparing the visual elements of the two games).  
8 uCool, however, contends that the Court should strike these and  
9 similar references in Lilith's filings because Lilith "waived any  
10 argument that it is asserting a copyright in the [user interface]"  
11 and admitted in its opposition to the motion to intervene "that  
12 comparing screen images is irrelevant to this lawsuit." Opp'n at  
13 23. For the reasons set forth below, Lilith's objection is  
14 OVERRULED and its request to strike is DENIED.

15 Lilith did not waive its ability to point to the visual  
16 similarities between the games. It included in its SAC screenshots  
17 comparing the user interfaces. Further, the Court agrees with  
18 Lilith that it would not have been relevant to this case to compare  
19 the intervenors' images with the parties' images.<sup>10</sup> After all,  
20 whether the parties' images infringed the intervenors' copyrighted  
21 images is immaterial to whether uCool infringed Lilith's  
22 copyrighted source code. The same cannot be said, however, about

23

<sup>10</sup> On August 17, 2015, the Court denied a motion to intervene, in  
24 part, because the intervenors' claims focused entirely on the  
25 visual similarities between their games and certain characters in  
Heroes Charge and Sword and Tower. ECF No. 93. In its order, the  
26 Court agreed with Lilith and uCool that intervention would be  
27 inappropriate because the intervenors' claims had nothing to do  
28 with Lilith's source code. The order, however, was not intended to  
imply that the visual similarities between Heroes Charge and Sword  
and Tower are irrelevant to this case.

1 the similarities between the parties' images.

2 A video game copyright protects all of the copyrightable  
3 elements of that game. While it is true that the copyright laws  
4 separately protect the user interface of a computer game as an  
5 independent audiovisual work (see Data E. USA, Inc. v. Epyx, Inc.,  
6 862 F.2d 204, 206 (9th Cir. 1988)), courts have also held that a  
7 user interface is a non-literal element of the program's source  
8 code (see Johnson Controls, Inc., 886 F.2d at 1175; Lotus Dev.  
9 Corp. v. Paperback Software Int'l, 740 F. Supp. 37, 63-65 (D. Mass.  
10 1990); see also Torah Soft Ltd. v. Drosnin, 136 F. Supp. 2d 276,  
11 283 (S.D.N.Y. 2001) (connecting the visual output of a computer  
12 program with the underlying program itself)). Consistent with that  
13 view, the Copyright Office issues a single copyright registration  
14 that protects all of a game's copyrightable elements, regardless of  
15 whether the game is registered as a literary or audiovisual work.  
16 See 17 U.S.C. § 102(b); 37 C.F.R. § 202.1. Thus, although Lilith's  
17 claim is focused on its source code, that claim includes all of the  
18 non-literal expressive elements of that code as well, including the  
19 user interface.

20 uCool argues that copyright protection as it relates to a  
21 video game's source code should be considered separately from a  
22 game's audiovisual aspects because, in part, there are many ways  
23 one can write source code to achieve the same audiovisual output.  
24 For that reason, the argument goes, similarities as to the  
25 audiovisual outputs are not probative of whether the copyright in  
26 the source code was violated.

27 While it is true that one cannot conclude based on a game's  
28 visual similarities that the literal alphanumeric instructions

1 written by the programmer are the same, that is not the point.  
2 Indeed, there are many different ways to write a book to achieve  
3 the same non-literal expressive elements of plot, setting,  
4 character, and so forth, whether through the selection of different  
5 words or the use of different languages. Insofar as the non-  
6 literal expressive elements of that book are substantially the same  
7 as another copyrighted book, however, the former has infringed on  
8 the latter regardless of whether the words themselves have been  
9 copied. Likewise, infringement will be found where the non-literal  
10 elements expressed by a game's source code -- including the user  
11 interface -- are substantially similar to another game, even though  
12 there are many different ways to write the source code to create  
13 those non-literal elements. For that reason, the Court rejects  
14 uCool's attempts to limit the analysis merely to whether the  
15 alphanumeric code itself was copied verbatim; copyright analysis is  
16 not so simplistic.

17 Accordingly, the Court finds that the user interface of Sword  
18 and Tower is one of the various non-literal elements of the source  
19 code protected by Lilith's copyright, including the visual elements  
20 as depicted through screenshots in Lilith's complaint, motion, and  
21 supporting papers. uCool's objection is therefore OVERRULED.

22 Given the significant evidence of copying in the previous two  
23 sections, the Court need not engage in a full analysis of whether  
24 the protected elements of the games' user interfaces are  
25 substantially similar. It is clear, however, that the striking  
26 similarities between the games' protected elements such as the  
27 visual appearance of characters and settings further support the  
28 Court's conclusion that Lilith is likely to prove substantial

1 similarity at trial. Indeed, the evidence shows that the games are  
2 almost identical from the user's standpoint, with only minor  
3 modifications. See Mot. 7-10; ECF No. 30-18 ("Yang Decl.") ¶¶ 3-  
4 13, Ex. A.

5 For the forgoing reasons, the Court finds that Lilith is  
6 likely to succeed on its copyright infringement claim.

7 **2. Trade Secret Misappropriation**

8 In order to demonstrate a likelihood of success on its trade  
9 secret claim under California's Uniform Trade Secrets Act  
10 ("CUTSA"), Lilith must show (1) the existence of a trade secret,  
11 and (2) misappropriation of the trade secret. AccuImage  
12 Diagnostics Corp. v. Terarecon, Inc., 260 F. Supp. 2d 941, 950  
13 (N.D. Cal. 2003) (citing Cal. Civ. Code § 3426.1(b)).

14 **a. Existence of a Trade Secret**

15 Under California law, a trade secret is defined as something  
16 that (1) derives independent economic value, actual or potential,  
17 from not being generally known to the public or to other persons  
18 who can obtain economic value from its disclosure or use; and (2)  
19 is the subject of efforts that are reasonable under the  
20 circumstances to maintain its secrecy. Cal. Civil Code §  
21 34.26.1(b).

22 Here, it cannot be questioned that Lilith derives independent  
23 economic value from Sword and Tower and by extension its protected  
24 source code. What is at issue is whether Lilith made reasonable  
25 efforts to maintain the source code for Sword and Tower as a  
26 secret.

27 Reasonable efforts to maintain the secrecy of certain  
28 information include limiting access to the information, advising

1 employees of the existence of a trade secret, requiring employees  
2 to sign nondisclosure agreements, and keeping secret documents  
3 under lock. See Religious Technology Center v. Netcom On-Line  
4 Communication Services, Inc., 923 F. Supp. 1231, 1253 (N.D. Cal.  
5 1995). "[F]ailure to employ the fullest range of protective  
6 techniques will not terminate the secrecy provided that the  
7 techniques employed were, in and of themselves, reasonably  
8 prudent." 1-1 Milgrim on Trade Secrets § 1.04.

9 The Court finds that Lilith's efforts to maintain the  
10 confidentiality of its source code, while not as rigorous as they  
11 could have been, were sufficiently reasonable to maintain the code  
12 as a trade secret. Lilith keeps its source code on a secure server  
13 and limits access only to those employees who need it to perform  
14 their duties. Lilith also encrypts the Sword and Tower source code  
15 so that it cannot be easily deciphered. Although Lilith failed to  
16 secure confidentiality agreements from all of the employees that  
17 had access to the code, Lilith has presented evidence to show that  
18 these employees understood Lilith's code to be confidential  
19 business information. Further, there is no evidence to suggest  
20 that any of these employees disclosed the code to a third party.

21 **b. Misappropriation**

22 uCool does not address the misappropriation element in its  
23 opposition or surreply. Regardless, the Court takes it up here and  
24 finds that Lilith is likely to succeed on this element as well.

25 Misappropriation can be established by either acquisition or  
26 disclosure/use:

27 (b) Misappropriation means:

28

- 1 (1) Acquisition of a trade secret of another without  
2 express or implied consent by a person who  
3 knows or has reason to know that the trade  
4 secret was acquired by improper means; or
- 5 (2) Disclosure or use of a trade secret of another  
6 without express or implied consent by a person  
7 who:
  - 8 (A) Used improper means to acquire knowledge of  
9 the trade secret; or
  - 10 (B) At the time of the disclosure or use, knew  
11 or had reason to know that his or her  
12 knowledge of the trade secret was:
    - 13 (i) derived from or through a person who  
14 had utilized improper means to  
15 acquire it;
    - 16 (ii) acquired under circumstances giving  
17 rise to a duty to maintain its  
18 secrecy or limit its use; or
    - 19 (iii) derived from or through a person who  
20 owed a duty to the person seeking  
21 relief to maintain its secrecy or  
22 limit its use.

23 Cal. Civ. Code § 3426.1. As explained below, Lilith has shown  
24 misappropriation by both acquisition and use.

25 Lilith provided evidence showing that uCool acquired and used  
26 the source code embodied in Sword and Tower without Lilith's  
27 consent. As detailed in the Court's copyright analysis above,  
28 Lilith has provided significant evidence showing that uCool copied  
its source code. This includes convincing evidence that at least  
one version of Heroes Charge (Version 1.8.1) included a portion of  
Lilith's code that triggers Lilith's copyright notice. Insofar as  
there was copying, there is no dispute that it was done without  
Lilith's consent.

Lilith also provided evidence showing that uCool knew or had  
reason to know that the source code was acquired by improper means

1 or in breach of a duty to maintain its secrecy. "Improper means"  
2 is defined as "theft, bribery, misrepresentation, breach or  
3 inducement of a breach of a duty to maintain secrecy, or espionage  
4 through electronic or other means." Cal. Civ. Code § 3426.1.  
5 uCool would have known, or should have known, that the source code  
6 that it copied in order to create Heroes Charge belonged to Lilith  
7 given that the user interface is almost identical to Sword and  
8 Tower, with which uCool would have been familiar given Sword and  
9 Tower's significant success in the video game market. Further, it  
10 is well known that source code is the confidential property of a  
11 game's owner. In that context, it is likely that a trier of fact  
12 will infer that uCool knew the code was acquired through improper  
13 means or in breach of a duty because Lilith would not have given  
14 its competitor, uCool, free access to its code.

15 For these reasons, the Court finds that Lilith is likely to  
16 succeed on its trade secret misappropriation claim.

17 **C. Irreparable Harm**

18 Lilith must provide "evidence and reasoned analysis" that the  
19 remedies available at law, such as monetary damages, are inadequate  
20 to compensate for that injury." eBay, 547 U.S. at 391.  
21 Alleged harm that is remote or speculative will not be considered  
22 irreparable; rather, the movant must demonstrate that the  
23 threatened harm is imminent. See Colorado River Indian Tribes v.  
24 Town of Parker, 776 F.2d 846, 849-851 (9th Cir. 1985).

25 Lilith advances two theories to support its assertion that it  
26 will suffer irreparable harm in the absence of a preliminary  
27 injunction: damage to its reputation and its alleged inability to  
28 secure an exclusive distribution agreement in the United States.

1       Loss of goodwill, as well as damage to reputation, can support  
2 a finding of irreparable harm. See Rovio Entm't, Ltd. v. Royal  
3 Plush Toys, Inc., No. C 12-5543 SBA, 2012 U.S. Dist. LEXIS 169020,  
4 \*29-33, (N.D. Cal. Nov. 27, 2012). Lilith argues that it has  
5 suffered reputational damage because some users have posted  
6 comments on the internet accusing Lilith of copying Heroes Charge.  
7 For the reasons set forth below, however, the Court is not  
8 convinced that anecdotal comments on the internet establish a  
9 likelihood of irreparable harm sufficient to justify extraordinary  
10 relief in the form of a preliminary injunction.

11       Lilith points to Rovio Entm't, Ltd. v. Royal Plus Toys, Inc.  
12 Id. In Rovio, the defendant was allegedly selling unauthorized  
13 knockoff plush toys that were inferior but nearly identical in  
14 appearance to the plaintiff's products in violation of its  
15 copyrights and trademarks. Id. at \*1. The court held that the  
16 plaintiff suffered irreparable harm, in part, because (1)  
17 irreparable harm in trademark cases includes a loss of trade, (2)  
18 defendant's product threatened plaintiff's reputation because it  
19 posed a potential public health risk, and (3) the potential harm to  
20 plaintiff was significant given the "great energy, time and money"  
21 plaintiff had spent building its reputation. Id. at \*31-32.

22       Although Lilith's evidence suggests the possibility of some  
23 damage to its reputation, unlike the plaintiffs in Rovio, Lilith  
24 has not expended great energy, time, and money to build its  
25 reputation outside of Asia in the markets where its reputation has  
26 allegedly been damaged by uCool. Indeed, Lilith is a relative  
27 newcomer to the United States, Europe, and other markets where  
28 Heroes Charge has been released. Moreover, unlike in Rovio where

1 the inferiority of the defendant's product was primarily  
2 responsible for plaintiff's reputational damage, it does not appear  
3 that Heroes Charge is necessarily inferior to Sword and Tower.  
4 Thus, while there is the potential for confusion in the market  
5 given the similarities between the games, the damage to Lilith's  
6 reputation caused by this confusion is relatively small. The  
7 potential damage is even more limited given that the parties, as  
8 stated during the hearing on this motion, are likely to go to trial  
9 in only nine months' time.

10 Instead of facing irreparable harm to its reputation, Lilith  
11 is primarily facing challenges to its ability to expand into new  
12 markets. Heroes Charge was released in the United States over a  
13 year before Sword and Tower and has built up a significant base of  
14 users after an aggressive marketing campaign. Lilith cannot easily  
15 penetrate this market given the popularity of Heroes Charge and the  
16 fact that Sword and Tower is incredibly similar from a user's  
17 perspective. Although Lilith has been able to secure nonexclusive  
18 distribution agreements for the release of Sword and Tower in the  
19 United States, it is likely that it would have been able to secure  
20 much better terms but for the presence of Heroes Charge in the  
21 marketplace. The difference in value between an exclusive and  
22 nonexclusive distribution contract, however, does not constitute  
23 irreparable harm given that it can be quantified and remedied  
24 through monetary damages.

25 Because Lilith has failed to establish that it will suffer  
26 imminent harm that cannot be remedied with monetary damages, the  
27 Court finds for uCool on this factor.

28 ///

1                   D.    Balance of the Equities

2                   " In each case, courts 'must balance the competing claims of  
3                   injury and must consider the effect on each party of the granting  
4                   or withholding of the requested relief.'" Winter, 555 U.S. at 24  
5                   (quoting Amoco Prod. Co. v. Gambell, 480 U.S. 531, 542 (1987)). In  
6                   doing so, the court balances the injury faced by the applicant for  
7                   an injunction against the injury that would be sustained by the  
8                   defendant if relief were granted. See American Motorcyclist Ass'n  
9                   v. Watt, 714 F.2d 962, 966-967 (9th Cir. 1983); Brooktree Corp. v.  
10                   Advanced Micro Devices, Inc., 705 F. Supp. 491, 497 (S.D. Cal.  
11                   1988).

12                   Here, the balance of the equities tips in uCool's favor. If  
13                   the Court were to grant Lilith's motion, uCool would be forced to  
14                   take down its most popular game, threatening uCool's viability as a  
15                   company. See also Open Text, S.A. v. Box, Inc., 36 F. Supp. 3d  
16                   885, 910 (N.D. Cal. 2014) ("A preliminary injunction is a drastic  
17                   remedy and the hardship on a preliminarily enjoined party who is  
18                   required to withdraw its product from the market before trial can  
19                   be devastating."). uCool would not only lose profits but would  
20                   continue to incur a significant amount of fixed costs associated  
21                   with Heroes Charge. Further, the harm to uCool would likely be  
22                   irreparable. Even if uCool was able reintroduce Heroes Charge  
23                   after trial, it would likely struggle to recapture its lost market  
24                   share. Given the dynamic and fast-moving nature of the video game  
25                   industry, there is a good chance that once users are no longer able  
26                   to use Heroes Charge, they will simply move on to another game. In  
27                   addition, if Heroes Charge was suddenly unavailable for play, uCool  
28                   ///

1 would likely suffer from a significant loss of goodwill, making it  
2 difficult to create trust with players in the future.

3 The equities are also affected by the eight months that passed  
4 from when Lilith discovered the alleged copying to when it filed  
5 for a preliminary injunction. Lilith first learned of uCool's  
6 allegedly unlawful copying in August 2014, at which point it  
7 attempted to resolve the dispute by issuing a take-down notice.  
8 The parties then exchanged correspondence through the end of  
9 November 2014, when those talks stalled without any resolution.  
10 Lilith then waited an additional four months before filing this  
11 suit, during which time uCool invested millions of dollars in  
12 Heroes Charge, including an ad that ran during the Super Bowl.  
13 Lilith argues that the four-month delay was justified because it  
14 was reluctant to become involved in costly litigation until it was  
15 necessary. Lilith claims filing suit was not necessary until March  
16 2015 because the harm to its reputation and its inability to secure  
17 exclusive distribution agreements did not become apparent until  
18 March 2015. These challenges were foreseeable given the similarity  
19 between the games, but even assuming that Lilith was justified in  
20 waiting, the delay still affects the equities in this case. uCool  
21 made huge investments during those four months that would likely be  
22 lost if the Court were to grant a preliminary injunction.

23 In contrast, Lilith does not face significant irreparable harm  
24 if an injunction is denied. As discussed in the previous section,  
25 if successful at trial (a mere nine months from now), Lilith could  
26 recover significant monetary damages that would compensate it for  
27 past harm. At that point, it could also ask the Court to  
28 permanently enjoin uCool from distributing Heroes Charge moving

1 forward.

2 For these reasons, the Court finds that the balance of  
3 equities tips in favor of uCool.

4 **E. Public Interest**

5 If evidence of infringement is strong, then the public  
6 interest favors its abatement given that the public has an interest  
7 in seeing the copyright laws enforced. See Flextronics Int'l, Ltd.  
8 v. Parametric Tech., Corp., 2013 U.S. Dist. LEXIS 133403, \*28 (N.D.  
9 Cal. Sept. 16, 2013). However, "[i]n the typical case, [this]  
10 consideration adds little . . . [except where] the public interest  
11 implicates separate issues." 5-14 Nimmer on Copyright § 14.06.

12 Here, evidence of infringement is strong, and therefore the  
13 public interest tips towards granting the injunction. However,  
14 because there are no issues relating to the public interest  
15 separate from Lilith's likelihood of success on the merits, the  
16 public interest factor does not weigh heavily in the Court's  
17 analysis.

18 **F. Balancing the Factors**

19 Having assessed each factor individually, the Court -- using  
20 its equitable discretion -- weighs the factors together to  
21 determine whether an injunction should ultimately issue. Judge  
22 Posner of the Seventh Circuit aptly described the task at hand:

23 A district judge asked to decide whether to grant or deny  
24 a preliminary injunction must choose the course of action  
25 that will minimize the costs of being mistaken. Because  
26 he is forced to act on an incomplete record, the danger  
27 of a mistake is substantial. And a mistake can be  
28 costly. If the judge grants the preliminary injunction  
to a plaintiff who it later turns out is not entitled to  
any judicial relief -- whose legal rights have not been  
violated -- the judge commits a mistake whose gravity is  
measured by the irreparable harm, if any, that the  
injunction causes to the defendant while it is in effect.

1       Am. Hosp. Supply Corp. v. Hosp. Products Ltd., 780 F.2d 589, 593  
2       (7th Cir. 1986).

3       Accordingly, the Court will only grant an injunction if the  
4       irreparable harm to Lilith if the injunction is denied, multiplied  
5       by Lilith's likelihood of success on the merits, exceeds the  
6       irreparable harm to uCool if the injunction is granted, multiplied  
7       by the likelihood that Lilith will not succeed on the merits.<sup>11</sup>

8       See id.; see also Drakes Bay Oyster Co. v. Jewell, 747 F.3d 1073,  
9       1099 (9th Cir. 2014) (applying a similar test). Although exact  
10      figures cannot be calculated, this formula provides the analytical  
11      framework within which the Court must make its decision.

12      This is a close case. Lilith has demonstrated a strong  
13      likelihood of success on the merits. Indeed, prior to the Supreme  
14      Court's decisions in eBay and Winter, such a showing would have  
15      compelled the Court to grant the requested relief. After  
16      considering the remaining factors, however, the Court finds that  
17      granting a preliminary injunction at this juncture would be  
18      inappropriate. Lilith has not shown a likelihood of irreparable  
19      harm. Further, because of the extent of the irreparable harm to

20      ///

21      ///

22      ///

23      ///

24      ///

25       <sup>11</sup> This framework can also be represented formulaically: Grant  
26       preliminary injunction if but only if  $P * H_p > (1 - P) * H_d$ , where  $P$  =  
27       Lilith's probability of success on the merits,  $H_p$  = the irreparable  
28       harm to the plaintiff if the injunction is not granted, and  $H_d$  =  
          the irreparable harm to the defendant if the injunction is granted.  
          Id.

1 the defendant if the injunction is granted, the balance of equities  
2 tips decidedly in uCool's favor.

3

4 **V. CONCLUSION**

5 For the forgoing reasons, Lilith's motion for preliminary  
6 injunction is DENIED. uCool's evidentiary objections are  
7 OVERRULED.

8

9 IT IS SO ORDERED.

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Dated: September 23, 2015

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UNITED STATES DISTRICT JUDGE